

ABSTRACT OF THE DISCLOSURE

A hyperbaric oxygen therapy system includes a pressure vessel containing a gas, an oxygen concentration measurement apparatus for monitoring the concentration of oxygen in the gas, an environmental control apparatus for controlling the temperature of the gas in the vessel, and a pressure/ventilation control apparatus for controlling the pressure of the gas in the vessel. The pressure vessel is capable of accommodating a patient. The oxygen concentration measurement apparatus includes an oxygen concentration analyzer and a plurality of gas lines connecting the oxygen analyzer to the pressure vessel. The pressure/ventilation control apparatus includes a pressure controlling valve, a pressure sensor, a ventilation valve, and a controller having a programmable pressure profile. The environmental control apparatus includes a scrubber, a heat exchanger and a blower located within the pressure vessel. A compressor for the system includes a compressor silencer. An airlock providing access to the pressure vessel includes a safety mechanism.